

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029020**Date Inspected:** 21-Jan-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** As noted below.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

Ultrasonic Testing of ESW**ESW P, Face A:**

This QA performed Ultrasonic Testing (UT) on approximately 3000mm of Tower Electroslag Complete Joint Penetration (CJP) shear plate weld designated as "ESW P" face A. Location (Y=0~3000) of this weld was inspected using this testing method.

This weld has been confirmed by QC Ultrasonic technicians in accordance with supplemental procedure SE-UT-D1.5-CT-108-ESW-R5.

This QA/QC observed five (5) recordable longitudinal indications at the time of testing.

This QA generated a TL-6027 UT report on this date.

Due to joint configuration and weld cap shape the transverse indications could not be evaluated for length or "X" location.

Indication #1: Y= 820mm

Sizing – A=77db, B= 50db, C= 4db, D= 23db

Sound Path= 81mm, Depth= 28mm

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Indication #2: Y= 1000mm

Sizing – A=77db, B= 50db, C= 11db, D= 18db

Sound Path= 162mm, Depth= 55mm

Indication #3: Y= 1330mm

Sizing – A=71db, B= 50db, C= 8db, D= 13db

X= -5mm, L= 15mm

Sound Path= 126mm, Depth= 43mm

Indication #4: Y= 1400mm

Sizing – A=79db, B= 50db, C= 6db, D= 23db

Sound Path= 104mm, Depth= 35mm

Indication #5: Y= 1630mm

Sizing – A=79db, B= 50db, C= 5db, D= 24db

Sound Path= 87mm, Depth= 29mm

Indication #6: Y= 1585mm

Sizing – A=66db, B= 50db, C= 2db, D= 14db

X= 0mm, L= 15mm

Sound Path= 55mm, Depth= 18mm

Indication #7: Y= 1550mm

Sizing – A=72db, B= 50db, C= 6db, D= 16db

Sound Path= 103mm, Depth= 35mm

Indication #8: Y= 1945mm

Sizing – A=68db, B= 50db, C= 4db, D= 14db

Sound Path= 103mm, Depth= 35mm

Indication #9: Y= 1875mm

Sizing – A=74db, B= 50db, C= 5db, D= 19db

Sound Path= 82mm, Depth= 28mm

Indication #10: Y= 1760mm

Sizing – A=80db, B= 50db, C= 7db, D= 23db

Sound Path= 119mm, Depth= 41mm

Indication #11: Y= 1930mm

Sizing – A=80db, B= 50db, C= 8db, D= 22db

X= 0mm, L= 15mm

Sound Path= 122mm, Depth= 41mm

Indication #12: Y= 2035mm

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Sizing – A=75db, B= 50db, C= 5db, D= 20db
Sound Path= 88mm, Depth= 30mm

Indication #13: Y= 2100mm
Sizing – A=79db, B= 50db, C= 6db, D= 23db
Sound Path= 97mm, Depth= 33mm

Indication #14: Y= 2380mm
Sizing – A=63db, B= 50db, C= 6db, D= 8db
Sound Path= 103mm, Depth= 35mm

Indication #15: Y= 2000mm
Sizing – A=69db, B= 50db, C= 6db, D= 13db
Sound Path= 101mm, Depth= 34mm

Indication #16: Y= 2400mm
Sizing – A=72db, B= 50db, C= 6db, D= 16db
Sound Path= 97mm, Depth= 33mm

Indication #17: Y= 2675mm
Sizing – A=71db, B= 50db, C= 7db, D= 14db
X= 0mm, L= 15mm
Sound Path= 116mm, Depth= 40mm

Indication #18: Y= 2630mm
Sizing – A=70db, B= 50db, C= 8db, D= 12db
X= -20mm, L= 20mm
Sound Path= 125mm, Depth= 43mm

Indication #19: Y= 2840mm
Sizing – A=74db, B= 50db, C= 9db, D= 15db
Sound Path= 145mm, Depth= 40mm

Indication #20: Y= 2860mm
Sizing – A=81db, B= 50db, C= 6db, D= 25db
Sound Path= 99mm, Depth= 34mm

Indication #21: Y= 2770mm
Sizing – A=81db, B= 50db, C= 9db, D= 22db
Sound Path= 145mm, Depth= 49mm

This QA performed UT of weld designated as ESW P in accordance with the approved supplemental procedure. Tandem report for work performed on this date has been completed by QC technician and signed by both QA/QC parties. Due to QA/QC disagreement on indication interpretation, tandem report may not reflect all indications

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

discovered by QA at time of testing. Please see TL-6027 for complete listing of QA recorded indications.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Conversation was relevant to testing performed during this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford, William	Quality Assurance Inspector
Reviewed By:	Reyes, Danny	QA Reviewer
